

# WAC 480-93

## Rule Overview

- This will be a brief overview of both the new rule sections and significant changes to existing rules.
- It is not an overview of all of the new or existing rules.
- Please feel free to ask questions at any time. We will attempt to answer all questions but remember that the answers are only the opinions of the individual speakers) and not official interpretations.
- For this reason, we request that any rule interpretation requests be submitted in writing either by letter or email.
- Our goal is to have all interpretation requests with answers on our website along with the rules. This will benefit all operators with similar issues.

## Chapter 480-93 WAC GAS COMPANIES--SAFETY

### WAC

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# WAC 480-93

- There are 33 separate rules in WAC 480-93.
- All of the existing rules were reviewed and either changed, added to, or re-written for clarity.
- Several rules were eliminated and many incorporated into other rules.
- There are also several new rules in 480-93.
- There are also at least 2 errors or omissions in the rules that we'll discuss.
- Many of the rule changes are based on results of past inspections, areas where existing State or Federal rules had loopholes or were unclear and areas where it made sense to require additional safety precautions.
- Some changes or additions are also based on past incidents that resulted in property damage, injury or worse.
- This rulemaking process was a 4 year effort where all of the operators in WA State were invited to participate and many did through stakeholders meetings and comment and response sessions.
- All operator comments and suggestions were considered and many were incorporated into the rules.
- Thank you to all of the operators who participated.

# WAC 480-93-005

## Definitions

- Section (3) “Business District” has been defined as an area where the public regularly congregates or where the majority of the buildings on either side of the street are regularly utilized, for financial, commercial, industrial, religious, educational, health, or recreational purposes. This affects the Valve Rule 480-93-100, and the Leak Survey Rule 480-93-188
- The definition was derived from the Gas Pipeline Technology Committee (GPTC).
- Section (12) the definition of a “High Occupancy Structure or Area” has been added to help define terms such as “Buildings of Public Assembly” which was used in the leak survey rule but not defined and other areas such as “where the public regularly congregate” which was used in the proximity rule. This new definition affects the Proximity Rule 020, Valve Rule 480-93-100, and the Leak Survey Rule 480-93-188.
- Section (23) “Transmission Line” definition changed to adopt the Federal definition in Part 192.3 This makes the new definition much less stringent and for this reason you will see increased leak survey and pipeline marker requirements for pipelines operating above 250 psig.

# NEW SECTION

## **WAC 480-93-012 Computation of time**

- This section was added to help operators know exactly what was meant by rule terms such as annually, yearly, monthly etc.
- Should enable operators to know exact due dates for maintenance activities and help maintain compliance with State and Federal codes.
- The timeframe definitions were written by the Attorney General's office based on past court cases.



# NEW SECTION

## WAC 480-93-013 Covered

### Tasks

- The State has adopted the Federal definition of “Covered Task” but has added “New Construction” to the definition
- The new definition is as follows:
  - (a) Is performed on a pipeline facility;
  - (b) Is an operations, maintenance, or new construction task;
  - (c) Is performed as a requirement of Part 192 CFR; and
  - (d) Affects the operation or integrity of the pipeline.
- This will bring all new construction activities under the personnel qualification rule and was done to provide a better level of pipeline safety.
- ASME B31Q is also proposing that new construction be added to the existing definition and this requirement will probably be adopted and added to the Federal rules in the future.

# WAC 480-93-015

## Odorization of gas

- This rule was re-written for clarity.
- The previous rule had conflicting requirements such as “all gas will be odorized” in accordance with Part 192.625. Since 192.625 does not require that all gas be odorized and the intent of the State rule is that all gas will be odorized, the rule was re-written without the reference to 192.625 to make the intent clear.
- The required use of odorant testing instrumentation for sniff tests is clearly defined. Some operators were attempting to use devices such as draeger tubes to test for odorant. This type of testing does not meet the requirements of determining whether the odorant is detectable at a level of  $1/5^{\text{th}}$  of the LEL.
- Master meter operators are exempt from this requirement if they meet 192.625(f) requirements.
- The new rule also requires that instruments be maintained, operated, and calibrated in accordance with the manufacturers recommendations. If there are no manufacturers recommendations then the instrument must be calibrated on an annual basis.

# **WAC 480-93-018**

## **Maps, drawings, and records of gas facilities**

- Re written for clarity.
- Partially drafted by the Attorney General's office to better spell out the Commission's authority to review any operator records.
- Requires that records be updated within 6 months of completion of construction activity.
- Records that employees would use such as maps, MAOP's, materials, etc. would have to be updated within 6 months of any substantial changes.



# **WAC 480-93-020**

## **Proximity considerations**

- Still requires Commission approval.
- Rules 480-93-020 which applied to >500 psig and 480-93-030 which applied to 251- 499 psig were combined into 1 rule.
- Added the defined term “High Occupancy Structure or Area” and removed the term “well defined outside area”. This should better define what areas or structures are included.
- Closed the 500 psig loophole. The previous 2 rules allowed an MAOP of 500 psig without approval. (Only 1 operator noticed that they could operate at 500 with no approval).
- Removed the zoning restriction.

# WAC 480-93-080

## Welder and Plastic Joiner Identification and Qualification

- Requires procedures and most welders to be qualified to API 1104 or ASME Section IX standards.
- Allows oxyacetylene welders to qualify to Part 192, Appendix C with certain limitations.
- Appendix C welders may only weld on certain size pipelines, and below certain pressures.
- Appendix C welders must requalify 2X year not to exceed 7-1/2 months.
- Plastic joiners must qualify annually not to exceed 15 months or if production joints are not tracked at a frequency not to exceed 12 months. (Part 192.285(c) requirement)

# WAC 480-93-100

## Valves

- Requires a written emergency valve maintenance program detailing the selection process, inspection, maintenance and operating procedures.
- Requires a written program detailing how operators will maintain valves during construction projects. This program is to ensure that valves are not paved over or their boxes destroyed. (both emergency and non-emergency valves are included)
- Details what factors operators must consider when deciding which valves are emergency valves.
- Requires a written service valve installation and maintenance program similar to the emergency valve program. The installation of valves on existing services is not required but the maintenance of service valves already installed and meeting the program criteria is required.
- Service valves meeting the program criteria must be operated and maintained annually.
- Operators will be given 1 year to have valves identified and an operation and maintenance program in place.

# WAC 480-93-110

## Corrosion Control

- Combined 480-93-110, 480-93-111, 480-93-112, and 480-93-115.
- Allows an extra 30 days to the existing 90 day remedial action requirement. This additional 30 days may only be used under certain circumstances such as permitting issues, material issues. In order to exceed the 90 day timeframe Operators must document and show that remedial action was initiated in a timely manner.
- Requires calibration and maintenance of CP equipment according to the manufacturer's recommendations.
- Operations and Maintenance Procedures manual must specifically detail survey and test methods.
- Casings installed after September 5, 1992 must have test leads.
- Requires follow up tests within 90 days where annual casing isolation tests reveal a potential shorted casing.
- Where the follow up test reveals a shorted condition, a leak survey must be conducted within 90 days and twice annually not to exceed 7-1/2 months after that until the shorted condition is repaired. This should allow operators more flexibility than the old rule which required leak surveys every 90 days with no grace period.
- Operators must have a written internal corrosion monitoring program with remedial action requirements.
- A cathodic protection test read must be taken each time steel pipe is exposed by an operator or their representative and the protective coating is removed.
- Operators must have a written atmospheric corrosion monitoring program with remedial action timeframes.

# **WAC 480-93-115**

## **Casings of Pipelines**

- When installing mains or transmission lines in casings or conduits, the ends must be sealed to stop or slow the migration of gas in the event of a leak. This is in addition to part 192.323 which requires casing sealing if water can enter casings installed under RR's or highways.
- When installing services in casings or conduits, the end nearest the building must be sealed to prevent the migration of gas in the event of a leak. Most operators use expanding foam that is compatible with PE.



# **WAC 480-93-124**

## **Pipeline Markers**

- In addition to Part 192.707 requirements markers are now required at certain locations which are currently exempted by Part 192.707(b). These locations include mains operating above 250 psig regardless of class location (where practical), on both sides of navigable waterways, on both sides of certain river, creek, or irrigation canal crossings, and on both sides of RR crossings.
- Requires markers at each end of suspended pipeline crossings and annual surveys of these markers.
- Requires replacement of damaged or missing markers within 45 days.
- Requires surveys of pipeline markers, other than suspended pipeline markers, at a frequency not to exceed 5 years.
- Requires operators to have maps, drawings or other sufficient records indicating where markers are required. Since class location dictates where certain markers are required, (192.707(b)(2)), operators will need to have maps of class locations.

# 480-93-140

## Service Regulators

- Requires service regulators to be installed, maintained and operated in accordance with the manufacturer's recommendations.
- Requires service regulators to be inspected and tested during initial turn-on or when a customer experiences a pressure problem.
- The inspection and test must include checking the regulator's outlet set pressure at a specified flow rate.
- Certain safety devices such as fracture disks are exempt from this rule.

# **WAC 480-93-155**

## **Increasing Maximum Allowable Operating Pressure**

- When upgrading to an MAOP above 60 psig, operators must submit a plan of procedures to the Commission for review at least 45 days in advance.
- Details which records must be included in the operators plan submitted to the Commission.
- Requires that upgrades be based on a previous pressure test that would substantiate the intended MAOP. (see interpretation 192.555 – 5, dated May 31, 2001)

# **WAC 480-93-170**

## **Tests and Reports for Pipelines**

- Requires steel services or mains to be tested to a level meeting the table in Part 192.619(a)(2)(ii). Previously there was a loophole in the Federal rules which allowed some pipelines to operate at pressures higher than the required test pressure.
- Requires that all service lines which are broken, pulled or damaged resulting in the interruption of the gas supply to be pressure tested from the point of damage to the service termination valve. This requirement should clarify Part 192.725 test requirements.
- Requires Operators to document all pressure tests. This includes installations which may have multiple tests on one segment of line. This is to ensure that operators are testing for the necessary length of time specified in their O&M manual which is usually based on pipeline size and length.
- Requires pressure tests to be conducted after the pipeline is installed and backfilled. (where feasible) No testing a coil on the truck and then installing it.
- Requires pressure testing equipment to be maintained, tested for accuracy, or calibrated in accordance with manufacturers recommendations. This includes, pressure charts, recorders, dead weights, and gauges etc. Equipment must be tagged with the expiration date of the accuracy or calibration test.

## WAC 480-93-175

### Moving and Lowering Gas Pipelines

- Now allows operators to lower in the ditch, pipelines operating at 60 psig or less and with a nominal diameter of two inches or less.
- Any pipelines lowered under the above section will require a leak survey to be completed within 30 days.
- Prohibits the lowering of pipelines with mechanical or threaded joints.



# WAC 480-93-178

## Protection of Plastic Pipe

### New Section

- Requires written handling and storage procedures including the maximum ultraviolet light exposure limit that follows the manufacturer's recommendations.
- Requires the use of "weak links" when pulling PE. This will ensure compliance with certain requirements of Part 192.321.
- Requires twelve inches of separation when running parallel with other utilities.
- Requires six inches of separation when running perpendicular with other utilities. (conduits are acceptable)
- Where these clearances are not possible other measures must be taken such as inserting services in conduits.
- Places a 30 day maximum for temporarily installed above ground plastic pipe.
- May only install plastic lines above ground on a temporary basis for 30 days unless Commission notification is made and the operator has a written monitoring program.
- Must use bedding material which has been recommended or approved by the manufacturer. Unless allowed by the manufacturer the bedding material must be essentially rock free. Plastic pipe may not be squeezed more than once in any location and may not be squeezed within twelve inches or 3 pipe diameters (whichever is greater) of a joint or fitting.

# WAC 480-93-180

## Plan of Operations and Maintenance Procedures

- Requires operators to have in their Procedures manual, plans and procedures for all requirements of 49 CFR Part 192 and chapter 480-93-WAC.

What this means is that if there is a requirement in either the State or Federal code and it's applicable to your particular system then you must have a procedure in your manual addressing it.

- Requires any procedures used by associated contractors to be in the operators procedures manual. Examples would be contract tapping crews, outside corrosion contractors, or any other contractors whose procedures would differ from the operators.
- Requires that any applicable portions of the manual be on site where O&M, inspection or emergency response activities are being performed.

## **WAC 480-93-185**

### **Gas Leak Investigation**

- Requires operators to not remove or release any gas facilities involved in an explosion, fire, death or injury until the Commission or lead investigative authority authorizes it. Once the situation is made safe the facility must also be kept intact until directed by the lead investigative authority.
- Removed the requirement to hand out odorant sniff cards when investigating odor calls and no gas is present.

# **WAC 480-93-186**

## **Leak Evaluation**

- Requires the use of a Combustible Gas Indicator that gives you concentrations of gas in air to grade leaks. You can not grade leaks with just a Hydrogen Flame Ionization unit. You can use an HFI for the initial determination as to whether there is gas present but as soon as gas is indicated a CGI must be used to determine the spread of gas and the concentrations present.
- After a leak has been repaired the leak area must be checked for residual gas.
- Where residual gas is present you must either pull it out of the ground with an aspirator or schedule a follow-up inspection within 30 days.
- Grade 1 or 2 leaks may only be downgraded once to a grade 3. The maximum repair timeframe for any leak which has been downgraded according to this section is 21 months.

## **WAC 480-97-187**

### **Gas Leak Records**

- Only real change is the requirement to have unique ID numbers such as serial numbers for each leak detection instrument on the leak record.



# WAC 480-93-188

## Gas Leak Surveys

- Requires that gas detection instruments be tested for accuracy, calibrated and operated according to the manufacturer's recommendations.
- If there are no manufacturer's recommendations then monthly testing is required.
- Buildings of public assembly was removed and high occupancy structures or areas was added. High occupancy structures or areas is now a defined term.
- Mains above 250 psig require annual leak surveys.
- After third-party excavation damage to services, operators must perform a gas leak survey from the point of damage to the tie-in.
- Operators must perform self audits of the effectiveness of it's leak detection and record keeping performance and keep records of this audit for 5 years. Audits must be performed at least every 3 years. (current requirement)
- Operators will be given 2 years to fully implement their leak survey program for business districts. This is due to the fact that "Business District" is now a defined term and the definition may be different from what operators are currently using. Operators must continue to survey business districts that they have already identified.

# WAC 480-93-200

## Reporting Requirements

- Removed the \$5000 reporting requirement.
- Requires that operators give notice to the Commission within 2 hours of any of the following situations: (these are only the significant changes from the current rules)
  1. evacuation of a building,
  2. any unintentional ignition of gas, or
  3. system pressures which exceed the MAOP plus the build-up amount intended for the operation of OPP equipment.
- Section (1)(e) is incorrect and should be 25 or more persons not 20 or more.
- Requires that operators give notice to the Commission within 24 hours of any uncontrolled release of gas for more than 2 hours,
- Operators must file a “Damage Prevention Statistics” report along with their annual report. The report must include locate numbers and third party damage statistics.
- Operators must send daily reports of construction activity to the Commission by 10:00 AM each day.
- In addition to the US DOT, operators must file alcohol and drug testing information to the Commission.

# THE END

